CLAIMS

What is claimed is:

- 1. A semiconductor wafer having a plurality of semiconductor devices formed thereon comprising:
- a portion of a silicon semiconductor wafer substrate, said portion of a silicon semiconductor wafer substrate having a first side, a second side and a plurality of street areas thereon forming areas on the portion of a silicon semiconductor wafer substrate within which a semiconductor device is located, the portion of a silicon semiconductor wafer substrate having portions thereof removed through the thickness thereof in the plurality of street areas thereof;
- at least two semiconductor devices formed on the first side of the portion of a silicon semiconductor wafer substrate, the at least two semiconductor devices each having a periphery having a street area extending therefrom, the at least two semiconductor devices each having at least one bond pad formed thereon, the at least two semiconductor devices each formed on the portion of a silicon semiconductor wafer substrate having portions of the substrate removed from the street areas of the portion of a silicon semiconductor wafer substrate, the at least two semiconductor devices each having the periphery thereof formed by the portions of the silicon semiconductor wafer substrate removed in the plurality of street areas of the portion of a silicon semiconductor wafer substrate;
- a first coating comprised of glass covering the first side of the portion of a silicon semiconductor wafer substrate and the at least two semiconductor devices formed on the first side of the portion of a silicon semiconductor wafer substrate, the first coating sealingly engaging the first side of the portion of a silicon semiconductor wafer substrate, the first coating on the first side of the portion of a silicon semiconductor wafer substrate covering the at least two semiconductor devices formed thereon without substantially covering the at least one bond pad formed thereon;

- a second coating comprising a removable glass material covering the second side of the portion of a silicon semiconductor wafer substrate substantially filling the portions of the street areas of the portion of a silicon semiconductor wafer substrate which have been removed separating areas of the portion of a silicon semiconductor wafer substrate from other areas thereof, the second coating contacting the first coating in the portions of the street areas of the portion of a silicon semiconductor wafer substrate which have been removed, the second coating substantially sealingly engaging the periphery of each of the at least two semiconductor devices; and
- a plurality of metal circuits being connected to the at least one bond pad of each of the at least two semiconductor devices, the at least one metal circuit extending to a location adjacent the periphery of each of the at least two semiconductor devices, the at least one metal circuit sealingly engaging the first coating on the portion of a silicon semiconductor wafer substrate and the at least one bond pad of each of the at least two semiconductor devices.
- 2. The portion of a semiconductor wafer of claim 1, wherein: the second coating comprises a glass coating which is etchable.
- 3. The portion of a semiconductor wafer of claim 1, further comprising: a plurality of metal circuits located on the first coating on the first side of the portion of a silicon semiconductor wafer substrate.